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### JUNIOR HIGH SCHOOL CURRICULA AND PROGRAMS<sup>1</sup>

### J. HARVEY RODGERS Harvard University

Someone has said that "the crowning merit of the junior high school lies in its curriculum." This thought led to an investigation of the programs of study actually provided by the junior high schools of the country. Comprehensive questionnaires were sent to junior high schools in every state reported by the Bureau of Education as having such schools. One hundred and one questionnaires were returned with data in such form as to permit interpretation, representing conditions in the junior high schools of all sizes and types in thirty-six states.

### CURRICULUM ORGANIZATION

In Table I are presented figures showing the forms of curriculum organization in 101 junior high schools. These figures show the following facts:

TABLE I
CURRICULUM ORGANIZATION OF 101 JUNIOR HIGH SCHOOLS

| Nature of Curriculum Organization        |                    | Having<br>s 7-8-9  |               | Having<br>es 7-8 | SCHOOLS OF<br>BOTH TYPES |                     |  |
|--|--------------------|--------------------|---------------|------------------|--------------------------|---------------------|--|
|  | Num-<br>ber        | Per-<br>centage    | Num-<br>ber   | Per-<br>centage  | Num-<br>ber              | Per-<br>centage     |  |
| General curriculum—all subjects required | 5<br>29<br>2<br>26 | 7<br>43<br>3<br>38 | 20<br>12<br>1 | 61<br>36<br>3    | 25<br>41<br>3<br>26      | 25<br>40<br>3<br>26 |  |
| tives                                    | 6                  | 9                  |               |                  | 6                        | 6                   |  |
| Total                                    | 68                 | 100                | 33            | 100              | 101                      | 100                 |  |

<sup>1.</sup> Of all junior high schools reporting, 25 per cent are reported to have a single fixed curriculum in which all subjects are required

<sup>&</sup>quot;"Harvard Seminaries in Secondary Education," Project 2021-F2122-7.

and no differentiation is afforded. This is true of 7 per cent of junior high schools of the three-grade type (Grades VII-VIII-IX) and of 61 per cent of junior high schools of the two-grade type (Grades VII-VIII).

- 2. Of all schools reporting, 75 per cent provide for some form and amount of differentiation: 40 per cent through a general curriculum with free electives, 3 per cent through differentiated curricula with no electives, 26 per cent through differentiated curricula with curriculum electives, and 6 per cent through differentiated curricula with free electives.
- 3. Of schools of the three-grade type 43 per cent provide for differentiation through a general curriculum with free electives, 3 per cent through differentiated curricula with no electives, 38 per cent through differentiated curricula with curriculum electives, and 9 per cent through differentiated curricula with free electives.
- 4. Of schools of the two-grade type 36 per cent provide for differentiation through a general curriculum with free electives, and one school provides for differentiation through differentiated curricula with no electives.
- 5. In junior high schools of the three-grade type the practice is predominantly to have either a general curriculum with free electives or differentiated curricula with curriculum electives.
- 6. In junior high schools of the two-grade type the practice is predominantly to have either a single fixed curriculum with all subjects required or a general curriculum with free electives.

It is clear that the majority of junior high schools of the twograde type are failing to meet one of the most fundamental ends of the reorganized system, i.e., to make anything like adequate provision for individual differences through differentiated subjectmatter.

It is to be noted that differentiated curricula are provided in one-half of the three-grade junior high schools. Of the thirtytwo schools reported to have differentiated curricula with some form of election, thirteen begin the differentiated curricula in the seventh grade, four in the eighth grade, and fifteen in the ninth grade; the last fifteen mentioned have free electives in the seventh and eighth grades and begin differentiated curricula in the ninth grade. Thus we find a distinct tendency to organize definitely differentiated curricula in junior high schools of the three-grade type, a tendency which is certainly open to severe criticism since it tends to destroy the diagnostic function of the junior high school. In all, fifteen schools of the three-grade type begin differentiated curricula in the seventh grade, a practice which is certainly to be condemned in the severest terms.

# THE CURRICULUM AND PROGRAM IN JUNIOR HIGH SCHOOLS OF THE TWO-GRADE TYPE

In Table II are presented figures indicating the nature and distribution of studies in junior high schools of the two-grade type. Many facts appear from these figures.

TABLE II

DISTRIBUTION OF CONSTANTS AND VARIABLES IN THIRTY-THREE JUNIOR HIGH
SCHOOLS COMPRISING GRADES SEVEN AND EIGHT

|   |   | Cons  | TANTS   |   | VARIABLES                                 |                                      |               |  |  |  |  |  |
|---|---|---|---|---|---|--------------------------------------|---------------|--|--|--|--|--|
| Subjects  | Gra   | de 7  | Gra   | ide 8   | Gra                                       | de 7                                 | Grade 8       |  |  |  |  |  |
|   | First<br>Half   | Second<br>Half  | First<br>Half   | Second<br>Half  | First<br>Half                             | Second<br>Half                       | First<br>Half | Second<br>Half                         |  |  |  |  |
| English Spelling Penmanship Literature Arithmetic General mathematics. Algebra United States history Civics. Political geography Physiology Physical training Music Drawing General science Manual training Domestic science Latin French Spanish | 33<br>10<br>10<br>9<br>28<br>5<br>28<br>5<br>26<br>18<br>12<br>16<br>19<br>4<br>17<br>21<br>1 | 33<br>10<br>10<br>9<br>28<br>5<br><br>28<br>5<br>26<br>18<br>12<br>16<br>19<br>4<br>17<br>21<br>1 | 33<br>10<br>10<br>8<br>27<br>3<br>2<br>28<br>12<br>13<br>9<br>12<br>15<br>16<br>15<br>20<br>23<br>2 | 33<br>10<br>10<br>8<br>27<br>3<br>2<br>27<br>16<br>13<br>8<br>12<br>15<br>16<br>17<br>20<br>23<br>2 | 1<br>1<br>2<br>3<br>6<br>2<br>3<br>3<br>3 | 1<br>1<br>2<br>3<br>6<br>2<br>3<br>3 | 2             | 2<br>1<br>2<br>1<br>4<br>9<br>10<br>11 |  |  |  |  |
| ItalianBookkeeping<br>Typewriting   |   |   | I   |   |   |                                      | 1<br>6<br>2   | 1<br>6<br>2                            |  |  |  |  |
| Vocations   | • • • • •   |   | 2   | 2   |   |                                      |               |  |  |  |  |  |

- 1. In the main the subjects required in junior high schools of the two-grade type are much the same as those found in a good elementary school. The most significant studies are civics (about one-half of the cases in the eighth grade), general science (about one-half of the cases in the eighth grade), and possibly increased emphasis on manual training and domestic science.
- 2. Constants in the seventh grade are as follows: English, 100 per cent; arithmetic, 85 per cent; United States history, 85 per cent; political geography, 79 per cent; physiology, 55 per cent; drawing, 58 per cent; music, 50 per cent; manual training, 51 per cent; domestic science, 64 per cent. Constants in the eighth grade were much the same except for a decrease in political geography and physiology, and an increase in civics and general science.
- 3. Characteristic junior high school constants such as civics, general science, and introductory mathematics appear in these programs but far less frequently than they should.
- 4. In junior high schools of the two-grade type variables (elective studies) are more conspicuous for their absence than for their presence. Where found, they are predominantly in one or more foreign languages, those studies constituting 54 per cent of the gross number of variables reported. Foreign languages and manual training or domestic science combined constitute more than three-fourths of the gross number of variables reported.

## THE CURRICULUM AND PROGRAM IN JUNIOR HIGH SCHOOLS OF THE THREE-GRADE TYPE

In Table III are represented figures indicating the character and distribution of studies in junior high schools of the threegrade type. These figures illustrate typical conditions as follows:

1. Constants in the majority of schools in the seventh grade are as follows: English, 100 per cent; arithmetic, 64 per cent; United States history, 67 per cent; political geography, 75 per cent; domestic science or manual training, 66 per cent; music, 70 per cent; drawing, 67 per cent; physiology, 50 per cent—much the same program of constants as the ordinary seventh grade in the

elementary school. Noticeable, however, is general mathematics, 36 per cent.

TABLE III

DISTRIBUTION OF CONSTANTS AND VARIABLES IN SIXTY-SEVEN JUNIOR HIGH
SCHOOLS COMPRISING GRADES SEVEN, EIGHT, AND NINE

|                       |             | (          | Const       | TANTS      |             |            |             | Vari       | ABLES       | Grade 9  Ist 2d Half Half |         |     |  |  |  |  |  |
|-----------------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|---------------------------|---------|-----|--|--|--|--|--|
| Subjects              | Grade 7     |            | Grade 8     |            | Grade 9     |            | Grade 7     |            | Grade 8     |                           | Grade 9 |     |  |  |  |  |  |
|                       | ıst<br>Half | 2d<br>Half                |         |     |  |  |  |  |  |
| nglish                | 67          | 67         | 67          | 67         | 67          | 67         |             |            |             |                           |         |     |  |  |  |  |  |
| rithmetic             | 4.3         | 43         | 30          | 28         | 3           | 2          |             |            | 2           | 2                         | 9       |     |  |  |  |  |  |
| eneral mathematics    | 24          | 24         | 19          | 20         | 11          | 11         |             |            |             |                           | 1       | 1   |  |  |  |  |  |
| Inited States history | 45          | 45         | 49          | 49         | 2           | 1          |             |            | 1           | 1                         | 2       | 2   |  |  |  |  |  |
| olitical geography    | 52          | 48         | 17          | 15         | 2           | 2          |             |            | 2           | 2                         | I       | 1   |  |  |  |  |  |
| Oomestic science      | 44          | 48         | 29          | 28         | 8           | 8          | 7           | 7          | 17          | 20                        | 26      | 27  |  |  |  |  |  |
| Innual training       | 45          | 47         | 24          | 24         | 8           | 8          | 8           | 8          | 13          | 16                        | 26      | 27  |  |  |  |  |  |
| hysical training      | 48          | 48         | 47          | 47         | 32          | 29         |             |            | 1           |                           | I       | 1   |  |  |  |  |  |
| Jusic                 | 47          | 47         | 31          | 30         | 13          | 13         | 5           | 5          | 10          | 8                         | 12      | 12  |  |  |  |  |  |
| Orawing               | 45          | 42         | 20          | 19         | 5           | 5          | 7           | 7          | 18          | 16                        | 18      | 18  |  |  |  |  |  |
| enmanship             | 33          | 33         | 18          | 18         | 2           | 2          | 7           | 7          | 1           | 1                         | I       | I   |  |  |  |  |  |
| hysiology             | 18          | 18         | 10          | 9          | 2           | 3          |             |            |             |                           | 4       | 4   |  |  |  |  |  |
| eneral science        | 10          | 10         | 10          | 10         | 14          | 12         |             |            |             | 1                         | 6       | 6   |  |  |  |  |  |
| pelling               | 10          | 19         | 16          | 16         | 5           | 5          |             |            |             |                           |         |     |  |  |  |  |  |
| ewing                 | 15          | 15         | 9           | 9          | 2           | 2          | 1           | 1          | 2           | 2                         | 5       | 1 8 |  |  |  |  |  |
| Civics                | , 9         | 9          | l o         | 0          | 10          | 12         | 1           |            |             |                           | 6       | 8   |  |  |  |  |  |
| iterature             | 1 6         | 6          | 4           | 4          | 1           | 1          | 1           |            | I           | 1                         | 1       | 1   |  |  |  |  |  |
| atin                  | 1           | 1          | 1           | 2          | 2           | 2          | 15          | 15         | 18          | 19                        | 34      | 34  |  |  |  |  |  |
| rench                 | I           | 1          |             |            | 1           | 1          | 16          | 16         | 18          | 18                        | 20      | 20  |  |  |  |  |  |
| panish                | 1           | 1          | ١           | 1          | 1           | 1          | 13          | 13         | 19          | 19                        | 18      | 18  |  |  |  |  |  |
| Bookkeeping           | 1           | 1          | 1           | 1          | 1           | 1          | I           | 1          | 3           | 4                         | 4       | 1 4 |  |  |  |  |  |
| Shop experience       | 7           | 1 7        | 5           | 5          | 1           | 1          | 2           | 2          | 4           | 4                         | 4       | 1 4 |  |  |  |  |  |
| Vocations             | 1           | 1          | Ĭ           | 2          | 3           | 6          | 1           | 1          |             | 1                         | 1       | 1   |  |  |  |  |  |
| Algebra               | 1           | 1          | 8           | 7          | 14          | 13         | 1           |            | 2           | 3                         | 7       | 1 : |  |  |  |  |  |
| Mechanical drawing    |             | 2          | 1           | i          | 1           | 1          |             | 1          | 2           | 2                         | 2       | 1 : |  |  |  |  |  |
| Ancient history       |             | 1          | I           | 1          | 3           | 3          | 1           | 1          | 1           | I                         | 9       | 1 9 |  |  |  |  |  |
| Stenography           |             | 1          | 1           | 1          | 1           | 1          |             | 1          | 2           | 2                         | 5       | ١.  |  |  |  |  |  |
| Cypewriting           |             |            |             | 1          | 1           | 1          | 6           | 6          | 8           | 8                         | 7       | 1   |  |  |  |  |  |
| Agriculture           |             |            | 1           | 1          | 1           |            | . 1         | 1          | 2           | 2                         | 3       | ١.  |  |  |  |  |  |
| Physical geography    |             |            | 1           | 1          | 2           | 2          | 1           | 1          | . 1         | 1                         | 2       | 1   |  |  |  |  |  |

- 2. Constants in the eighth grade are predominantly: English, 100 per cent; arithmetic, 45 per cent; United States history, 73 per cent; domestic science or manual training, about 40 per cent; music, 46 per cent; general mathematics, 46 per cent.
- 3. Constants in the ninth grade cannot be said to include any study except English, though the figures for general science, civics, and algebra are worthy of notice as indicating possible tendencies.
- 4. Even in junior high schools of the three-grade type apparently there is a relative scarcity of variables. For the most part the variables offered are domestic science or manual training, foreign languages, drawing, and music.

- 5. Of the gross number of variables offered in the seventh grade nearly one-half are in foreign languages, 18 per cent are in domestic science or manual training, 22 per cent are in music, drawing, or penmanship, and the remaining 10 per cent are scattering.
- 6. Of the gross number of variables offered in the eighth grade 37 per cent are in foreign languages, 20 per cent in domestic science or manual training, 20 per cent in music, drawing, or penmanship, and the remaining 23 per cent are scattering with some slight emphasis on commercial subjects.
- 7. Of the gross number of variables offered in the ninth grade 31 per cent are in foreign languages, 22 per cent in domestic science or manual training, 13 per cent in music and drawing, and the remaining 33 per cent are scattering, again with some slight emphasis on commercial subjects.
- 8. Except for domestic science and "manual training," practicalarts subjects are far from common in the junior high schools studied. In most schools elective work is practically limited to domestic science or manual training and the foreign languages, with here and there some provision for commercial studies. Ancient history and algebra are more commonly offered than shop work.

#### DIFFERENTIATED CURRICULA

In Table IV are presented figures showing the character and distribution of constants and variables in various curricula in junior high schools of the three-grade type providing differentiated curricula, at least to the extent of having different "courses" formally designated by such titles as Academic Course, Commercial Course, Industrial Course, Agricultural Course, etc. In answer to the question: "What differentiated curricula do you offer?" replies were made naming in all twenty-three different curricula, or, rather, giving twenty-three different names to so-called different curricula. However, those courses could easily be grouped under three significant heads and in Table IV only three different groups are distinguished, "Academic," "Classical," and "General" courses, for example, being combined under the one head "Academic Curricula."

TABLE IV

DISTRIBUTION OF REQUIRED AND ELECTIVE STUDIES IN THIRTY-FOUR JUNIOR HIGH SCHOOLS COMPRISING GRADES SEVEN, EIGHT, AND NINE, WHICH HAVE DIFFERENTIATED CURRICULA

| Academic<br>Curricula   |   |  |  |            |             | Commercial<br>Curricula  |   |   |   |       |          |                 | Practical-Arts<br>Curricula   |   |                |         |                                |  |
|---|---|--|--|------------|-------------|--|---|---|---|-------|----------|-----------------|---|---|----------------|---------|--------------------------------|--|
| Subjects  | Required  | ed Electives   |  |            | Required    |  |   | Electives   |   |       | Required |                 |   | Electives   |                |         |                                |  |
|   | 7   | 8  | 9  | 7          | 8           | 9  | 7 | 8   | 9   | 7     | 8        | 9               | 7   | 8   | 9              | 7       | 8                              | 9  |
| English. Arithmetic General mathematics. United States history Political geography Domestic science Manual training Physical training. Music Drawing Penmanship Physiology. General science. Civics Spelling Latin French Spanish Social study Practical arts Literature Vocations. Algebra Mechanical drawing Ancient history. Typewriting | 344 122 233 288 266 277 313 332 211 12 22 38 80 3 | 34<br>7<br>25<br>30<br>10<br>14<br>15<br>31<br>27<br>15<br>5<br>4<br>12<br>17<br>4<br>3<br><br>2<br>9<br>1<br>1<br>5<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 34 1 1 1 2 1 1 1 4 4 8 8 2 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | <br>I<br>I | <br>10<br>8 | <br>1<br>1<br>10<br>10<br>13<br>3<br>15<br><br>1<br>20<br>3<br>3<br>1<br>2<br>2<br>2<br>1<br>2<br>3<br>1<br>1<br>2<br>3<br>1<br>1<br>2<br>1<br>1<br>1<br>1 | 1 | 31<br>9<br>14<br>27<br>14<br>13<br>21<br>28<br>27<br>7<br>12<br>20<br>4<br><br>2<br>4<br><br>2<br>9<br><br>13 | 31 16 12 3 7 8 25 23 100 5 11 8 8 1 1 4 4 3 3 7 | 1 2 4 | 1 2 4 I  | 888             | 34<br>12<br>23<br>28<br>19<br>21<br>31<br>32<br>31<br>12<br>11<br>12<br>14<br><br>7<br><br>2<br>3<br>6<br>1 | 344 66 255 344 111 122 311 166 8 8 11 15 23 2 2 2 3 3 3 100 116 | 15<br>15       | 1 1 3 3 | 33 99 91 1 1 3 3 2 2 1 1 6 6 1 | 10 11 22 55 55 55 55 55 55 55 55 55 55 55 55 |
| Bookkeeping Business practices Biology Agriculture Physics Economics  |   |  |  |            |             | <br>I  |   | 3<br>2<br>  | 9<br>   |       | 8        | 9<br>3<br>2<br> | <br>I   | <br>I   | <br><br>I<br>I |         |                                | 1  |

The figures presented in this table indicate the following facts:

- I. Few significant differences are found between the constants of the three curricula. The most significant apparently are: more arithmetic for pupils in the eighth and ninth grades of the commercial curricula and less general mathematics in the eighth grade of those curricula; more general science in the practical-arts curricula; less algebra in the ninth grade of the commercial curricula; more mechanical drawing in the eighth grade of the commercial and practical-arts curricula, and more mechanical drawing in the ninth grade of the practical-arts curricula.
- 2. In variables the only significant differences found are: the large amount of foreign language in the academic curricula; the large amount of domestic science and manual training in the aca-

demic curricula; the large amount of drawing in the academic curricula; penmanship in the commercial curricula; bookkeeping in the commercial curricula.

3. From the figures given and from other data not readily adapted for presentation in full it appears clear that the assumed differentiation of curricula exists more in name than in practice.

#### SUMMARY AND CONCLUSIONS

- 1. A comparison of the two-grade junior high school with the three-grade junior high school shows that the latter is better in almost every respect. The two-grade junior high school seldom affords a form of education noticeably different from the better class of older elementary schools, and provision for individual differences is very unsatisfactory.
- 2. The curriculum organization of the two-grade junior high school is predominantly a single curriculum without electives, 61 per cent of the thirty-three studied having that organization, while 36 per cent only provide for a general curriculum with free electives, and one school only provides for differentation through differentiated curricula without electives.
- 3. The three-grade junior high school tends to have either a general curriculum with free electives (43 per cent of all studied) or differentiated curricula with curriculum electives (38 per cent of those studied).
- 4. A dangerous tendency of the three-grade junior high school is toward the premature organization of differentiated curricula, 50 per cent providing for such differentiated curricula somewhere in the junior high school and 22 per cent beginning such differentiated curricula as early as the seventh grade.
- 5. The most common form of election in junior high schools both of the two-grade type and of the three-grade type is the election of a foreign language. The only other common elections are domestic science or manual training, music, and drawing.
- 6. Such studies as civics, general science, and introductory mathematics are very far from occupying the places which they should occupy in the junior high school.
- 7. Formally nominated curricula differ more in name than in character.